

Daftar Pustaka

- Allen, C.M., Sharman, W.M., Van Lier, J.E., 2001. Current Status of Phthalocyanines in The Photodynamic Therapy of Cancer. *J. Porphyr. Phthalocyanines JPP* 05, 161–169.
- Allison, R.R., *Et. al.*, 2004. Photosensitizers in Clinical PDT. *Photodiagnosis and Photodynamic Therapy*. 1:27—42.
- Asriani, A., 2019. *Karakteristik Fisikokimia Senyawa Phthalocyanine untuk Terapi Kanker secara Fotodinamik*. Skripsi. Purwokerto. Fakultas Farmasi: Universitas Muhammadiyah Purwokerto.
- Bellnier D.A., *Et. al.*, 2006. Clinical Pharmacokinetics of The PDT Photosensitizers Porfimer Sodium (photofrin), 2-[1-hexyloxyethyl]-2-devinylpyropheophorbide-a (Photochlor) and 5-ALA-induced Protoporphyrin IX. *Lasers SurgMed*. 38:439–44.
- Bonnet, R. 2000. *Chemical Aspect of Photodynamic Therapy*. London: Gordon and Breach Publisher.
- Bonnett, R., 2002. Progress with Heterocyclic Photosensitizers for The Photodynamic Therapy (PDT) of Tumours. *J. Heterocycl. Chem*. 39, 455–470.
- Bose, B. dan Dube, A. 2008. Photodynamic Efficacy of Chlorin p6: a pH Dependent Study in Aqueous and Lipid Environment. *Journal of Photochemistry and Photobiology B: Biology*. 93,32-35.
- Braichotte, D.R., Savary, J.F., Monnier, P., van den Bergh, H.E. 1996. Optimizing Light Dosimetry in Photodynamic Therapy of Early Stage Carcinomas of The Esophagus Using Fluorescence Spectroscopy. *Lasers Surg Med*. 19(3):340—346.
- Bray, F., *Et. al.*, 2018. Global Cancer Statistics 2018: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries: Global Cancer Statistics. *CA. Cancer J. Clin*.
- Castano AP, Demidova TN, Hamblin MR. 2005. Mechanism in Photodynamic Therapy: Part Two- Cellular Signaling, Cell Metabolism and Modes of Cell Death. *Photodiagnosis and Photodynamic Therapy* 2005;2:1-23.
- Christina, R., Kritopo, H., Limantara, L. 2008. Photodegradation and Antioxidant Activity of Chlorophyll A From Spirulina (Spirulina sp.) Powder. *Indo. J. Chem*. 8 (2) : 236–241.

- Daina, A., Michielin O., Zoete V. 2014. iLOGP: a Simple, Robust, and Efficient Description of n-Octanol/Water Partition Coefficient for Drug Design Using the GB/SA Approach. *Journal of Chemical Information and Modeling*.
- Darwent, J. R. Et. al., 1982. Metal Phthalocyanines and Porphyrins as Photosensitizers for Reduction of Water to Hydrogen. *Coordination Chemistry Review*, 44(1), 83-126.
- Depkes RI. 1979. *Farmakope Indonesia Edisi III*. Jakarta: Depkes RI.
- Dougherty, T. J.; Marcus, S. L. 1992. Photodynamic Therapy. *Eur. J. Cancer*, 28A, 1734-1742.
- Fernandez, J. M, Bilgin, M. D., Grossweiner, L. I., 1997. Singlet Oxygen Generation by Photodynamic Agents. *Journal of Photochemistry and Photobiology B: Biology* 37, 131-140.
- Fitriatuzzakiyyah, N., Sinuraya R. K. dan Puspitasari I. M.. 2017. Terapi Kanker dengan Radiasi: Konsep Dasar Radioterapi dan Perkembangannya di Indonesia. *Jurnal Farmasi Klinik Indonesia*. 6(4), 311-320
- Foote, C.S. (1968). Mechanisms of Photosensitized Oxidation. There are Several Different Types of Photosensitized Oxidation Which may be Important in Biological Systems. *Science*.162:963-970.
- Frackowiak, D., Et. al., 2001. Yield of Intersystem (Singlet-Triplet) Crossing in Phthalocyanines Evaluated on The Basis of a Time in Resolved Photothermal Method. *Journal of Photochemistry and Photobiology A: Chemistry*, 141:101-108.
- Gandjar I.G., Rohman A. 2007. *Kimia Farmasi Analisis*. Yogyakarta : Pustaka Pelajar.
- Hamblin, Michael R. dan Tatiana N.D. 2006. *Mechanism of Low Level Laser Therapy. Proceeding of SPIE-The International Society for Optical Engineering*. March 2006. 6140:61400.
- Hirobara S., M., Et. al., 2004, Hydrophobicity Parameters (Log P) of Glycoconjugated Porphyrins for Photodynamic Therapy Evaluated by Reversed Phase HPLC, *J. Porphyr. Phtalocya*, 1289–1292.
- Jobin Yvon Ltd. : A Guide to Recording Fluorescence Quantum Yields, <http://www.chem.ufl.edu/~kschanze/manuals/quantumyieldguide.pdf>., download pada 2 November 2018.

- Jocham, D., Stepp, H., Waidelich, R. (2008). Photodynamic diagnosis in urology: state-of-the-art. *European urology*. 53:1138–1150.
- Kemenkes RI. 2018. Riset Kesehatan Dasar; RISKESDAS. Jakarta: Kemenkes RI.
- Kubát, P., Lang K., Anzenbacher P. Jr., 2004. Modulation of Porphyrin Binding to Serum Albumin by pH. *Biochimica et Biophysica Acta*. 1670, 40-48.
- Kraljic, I. and Mohsni S. E. 1978 .A New Method for the Detection of Singlet Oxygen in Aqueous Solution. *Photochemistry and Photobiology*. Vol. 28. pp. 577-581
- Li, F. *Et. al.*, 2016. Reducing Both Pgp Overexpression and Drug Efflux with Anti-Cancer Gold-Paclitaxel Nanoconjugates. *PLoS ONE* 11(7):1-16.
- Love, W.G., *Et al.*, 1996. Liposome-Mediated Delivery of Photosensitizers: Localization of Zinc (II)-Phthalocyanine within Implanted Tumors after Intravenous Administration. *Photochem Photobiol*. 63, 656–661.
- Luksiene, Z., 2003. Photodynamic Therapy: Mechanism of Action and Ways to Improve The Efficiency of Treatment 14.
- Maiya, B.G., 2000. Photodynamic Therapy (PDT): 2. Old and New Photosensitizers. *Resonance* ,15-29.
- Menteri Kesehatan Republik Indonesia. 2007. *Keputusan Menteri Kesehatan Republik Indonesia Nomor 430/Menkes/SKIV/2007 Tentang Pedoman Pengendalian Penyakit Kanker*. Jakarta : Menkes RI.
- Nackiewicz, J., Kliber, M., 2015. Synthesis and Selected Properties of Metallo and Metal-free 2,3,9,10,16,17,23,24 –octacarboxyphthalocyanines. *Arkivoc*. 269.
- Ogunsipe, A., Mare D, Nyokong T., 2003. Solvent Effect on the Photochemical and Fluorescence Properties of Zinc Phthalocyanine Derivatives. *Journal of Molecular Structure* 650, 131-140.)
- Parkhats, M.V., *Et. al.*, 2009. Dynamics and Efficiency of the Photosensitized Singlet Oxygen Formation by Klorin e6: The Effects of the Solution pH an Polyvinyl pyrrolidone. *Optics and Spectroscopy*. 107 (6) : 974–980.
- Pavani, C., *Et. al.*, 2009. Effect of Zinc Insertion and Hydrophobicity on The Membrane Interactions and PDT Activity of Porphyrin Photosensitizers. *Photochem Photobiol Sci* 8, 233–240.
- Raharjo, S. 2004. *Kerusakan Oksidatif pada Makanan*. Yogyakarta : Pusat Studi Pangan dan Gizi Universitas Gadjah Mada.
- Reksohadiprojo, M.S., 1985, *Strategi dalam Riset Obat melalui Pendekatan Farmakokimia atau Kimia Medisinal*, Fakultas Farmasi, UGM, Yogyakarta.

- Sharman W. M., Allen C. M., Van L. J. E. 1999. Photodynamic Therapeutics: Basic Principles and Clinical Applications. *Drug Discov Today*. 4:507–17.
- Slota, R. and Gabriela D., 2003. UV Photostability of Metal Phthalocyanines in Organic Solvents. *Inorg Chem*, 42,5743-5750.
- Svanberg, K., *Et. al.*, 1998. Laser-based Spectroscopic Methods in Tissue Characterization. *Ann NY Acad Sci*. 838:123—129.
- SwissADME. 2019. *Swiss Institute of Bioinformatic*.
- Syahrizal, D., 2008. Terapi Gen: Dasar dan Posisinya sebagai Modalitas Pengobatan. *Jurnal Kedokteran Syiah Kuala*. 8:167-174.
- Syakilah, F., 2019. *Karakteristik Fisikokimia Senyawa Fe(II) Phthalocyanine untuk Terapi Kanker secara Fotodinamik*. Skripsi. Purwokerto. Fakultas Farmasi: Universitas Muhammadiyah Purwokerto.
- Vitol, S. 1991. Uptake of Low-Density Lipoprotein by Malignant Cell-Possible Therapeutic Application. *Cancer Cell*. 3(2):488-95.
- Wagnieres, G. A., Star, W. M., Wilson, B. C., 1998. In Vivo Fluorescence Spectroscopy and Imaging for Oncological Applications. *Photochem Photobiol*. 68(5):603—632.
- Wöhrle, D., *Et. al.*, 1998. Photodynamic Therapy of Cancer: Second and Third Generation of Photosensitizers. *Russian Chemical Bulletin*. 47(5), 807-816
- Zhang, Xian-Fu, Yakui Zhang, Limin Liu. 2014. Fluorescence Lifetime and Quantum Yield of Ten Rhodamin Derivatives: Structural Effect on Emission Mechanism in Different Solvents. *Journal of Luminescence*. 145, 448-453.